

What is claimed is:

1. A screen printing apparatus for printing paste onto a substrate via pattern apertures of a mask plate by sliding a squeegee head on the mask plate, said squeegee head comprising:

- 5 (a) a paste storage for storing paste;
- (b) a pressure applying member for applying pressure to the paste in said storage;
- (c) a paste cell for accommodating the pressurized paste and bringing the paste into contact with a surface of the mask plate via an opening
- 10 formed on a lower face of said cell;
- (d) a scraper having a slope forming a front wall and a rear wall in a squeegee-moving direction, and forming a brim of the opening with a lower end of said scraper contacted with a surface of the mask plate; and
- (e) a paste-flow-adjusting member disposed in said cell, for
- 15 flowing the pressurized paste into the opening in a slant direction by blocking the paste from flowing into a specific area above the opening.

2. The screen printing apparatus of claim 1, wherein said paste-flow-adjusting member has a round sectional view.

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3. The screen printing apparatus of claim 1, wherein said paste-flow-adjusting member has a transformed diamond-shape sectional view.

4. The screen printing apparatus of claim 1, wherein said paste-flow-adjusting member forms a triangle-prism.

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5. A screen printing apparatus for printing paste onto a substrate

via pattern apertures of a mask plate by sliding a squeegee head on the mask plate, said squeegee head comprising:

(a) a paste storage for storing paste;

(b) a pressure applying member for applying pressure to the  
5 paste in said storage;

(c) a paste cell for accommodating the pressurized paste and bringing the paste into contact with a surface of the mask plate via an opening formed on a lower face of said cell;

(d) a scraper forming a front wall and a rear wall in a  
10 squeegee-moving direction, and forming a brim of the opening with a lower end of said scraper contacted with a surface of the mask plate; and

(e) a paste-shearing member, disposed in said cell and having a vertical face contacting with the pressurized paste, for shearing the paste flowing down along the contacting face.

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6. The screen printing apparatus of claim 5, wherein said paste-shearing member forms a lattice.

7. A method of screen printing for printing paste onto a substrate  
20 via pattern apertures of a mask plate by sliding a squeegee head on the mask plate, said method comprising the steps of:

(a) pressurizing the paste in a paste storage disposed in the squeegee head;

(b) accommodating the pressurized paste in a paste cell  
25 having an opening at a lower face of the paste cell, and bringing the paste into contact with a surface of the mask plate; and

(c) blocking the paste from flowing into a specific area above

the opening with a paste-flow-adjusting member disposed in said cell, and flowing the paste into the opening in a slant direction.

8. A method of screen printing for printing paste onto a substrate  
5 via pattern apertures of a mask plate by sliding a squeegee head on the mask plate, said method comprising the steps of:

(a) pressurizing the paste in a paste storage disposed in the squeegee head;

(b) accommodating the pressurized paste in a paste cell  
10 having an opening at a lower face of the paste cell, and bringing the paste into contact with a surface of the mask plate; and

(c) shearing the paste flowing down along a contacting face with a paste-shearing member disposed in the cell and having vertical faces contacting with the pressurized paste.